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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/533,499

04/13/2006

Ingrid Paul Hilda Van Haesendonck

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EXAMINER

HANRAHAN, JOSEPH M.J.

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

07/16/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/533,499	Applicant(s) VAN HAESENDONCK ET AL.	
	Examiner JOSEPH M.J. HANRAHAN	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/25/09.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,8-22,25 and 26 is/are pending in the application.
- 4a) Of the above claim(s) 1,8-11 and 25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-22 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/29/05, 10/5/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Claims 12-22, and 26 in the reply filed on 3/25/09 is acknowledged. The traversal is on the ground(s) that the cited reference does not teach the common technical feature which is inclusion of rhamnolipids in bakery products. The examiner agrees that the common technical feature is inclusion of rhamnolipids in bakery products and that Gianni (US Pat. No. 5501966) does not teach that feature. However, the claims also do not share the special technical feature of the amount of rhamnolipid, or the combination of the rhamnolipid with flour or other active ingredients as recited in claim 12. Based upon this, the restriction is maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

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2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 12-14, 18, 20-22, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pomeranz (US Pat. No. 3679433) in view of Piljac (BE 1005825 A4) and Singhal (Handbook of Food Microbiology, *Bread from Wheat Flour*, Rekha Singhal and Pushpa Kulkarni (1999) Academic Press-see attached).

5. Regarding Claim 12, Pomeranz teaches dough formulations containing 0.25 parts glycolipids per 100 parts of flour (Col. 2, Lines 64-65) and further containing a potassium bromate oxidizing agent (Col. 3, Line 75) wherein the glycolipid increased the volume of the bread product (Table 3). Pomeranz does not teach that the glycolipid is a rhamnolipid.

6. Piljac teaches the use of rhamnolipids as emulsifiers that are suitable for use in baked goods (Pg. 9, Line 30). Rhamnolipids are a type of glycolipid. Therefore, it would have been obvious to a person of ordinary skill in the art to have used a known

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emulsifier suitable for baked goods, such as the rhamnolipid taught in Piljac, since a wide variety of emulsifiers are known to give improved baked products (Singhal Table 5).

7. Regarding Claim 13, Piljac teaches that the rhamnolipids may be incorporated into an aqueous solution (Pg. 6, Line 30) which is a liquid.

8. Regarding Claims 14 and 18, Pomeranz teaches the addition of wheat gluten to the dough mixture (Col. 3, Lines 16-17). The addition of gluten with the glycolipid gives an increase in bread volume relative to when gluten is added alone (Table 2).

Therefore, there is a synergistic effect to increase bread volume when the two are added together. The person of ordinary skill in the art would have been aware that another glycolipid, such as the rhamnolipid taught by Piljac would also have had an effect on the volume of bread when added alongside gluten. The limitation of intermediate freezing is an intended use and does not limit the structure of the bread improver composition. The examiner has interpreted this claim to be limited to another improver composition that is gluten and acts synergistically with the rhamnolipid.

9. Regarding Claim 19, Singhal teaches the use of azodicarbonamides as a fast acting oxidizing agent that improves the gas retention of the dough (Table 5). Gas retention contributes to bread volume.

10. Regarding Claims 20-22 and 26, Piljac discloses a rhamnolipid at Pg. 7 that has the formula $\text{RhRhC}_{10}\text{C}_{10}$ ($\text{C}_{32}\text{H}_{58}\text{O}_{13}$) which is identical to that shown in applicants' specification Pg. 8, Line 10. The limitations found in these claims relate to the process in which the rhamnolipid is obtained. The features of the process impart limitations on

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the claims only so far as the resultant structure. Therefore, the limitation imparted from Claims 20 and 21 is that the improver composition must possess a rhamnolipid. With respect to Claim 22, the Rhamnolipid must be limited to one of the chemical formulae as given or a variant thereof with a shorter or longer side chain which is disclosed by Piljac as noted above.

11. Claims 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soee (EP 1108360) in view of Piljac (BE 1005825 A4) and Singhal (Handbook of Food Microbiology, *Bread from Wheat Flour*, Rekha Singhal and Pushpa Kulkarni (1999) Academic Press-see attached) and (Innova Insights, http://www.developotechnology.co.za/index.php?option=com_content&task=view&id=13762&Itemid=31. *Enzymes In* (May 2002) see attached).

12. Regarding Claim 12, Soee teaches an bread improver composition that results in enhanced bread volume (§ 24-25) that is supplemented with a glycolipid (§ 39) wherein the final product has 0.022% digalacosyldiglyceride which is a glycolipid (Pg. 20, Table 2.3). The composition of Soee may also include oxidoreductases (§ 45) which are equivalent to oxido reductantia. Soee does not, however, teach that the glycolipid is a rhamnolipid.

13. Piljac teaches the use of rhamnolipids as emulsifiers that are suitable for use in baked goods (Pg. 9, Line 30). Rhamnolipids are a type of glycolipid. Therefore, it would have been obvious to a person of ordinary skill in the art to have used a known glycolipid suitable for baked goods, such as the rhamnolipid taught in Piljac, since a

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wide variety of emulsifiers are known to give improved baked products (Singhal Table 5).

14. Regarding Claim 13, Soee teaches that oat oil may be used which is a liquid (¶ 40).

15. Regarding Claim 14 and 15, Soee teaches the addition of lipase to hydrolyze the glycolipids in the dough to give bread products with improved characteristics (¶¶ 25 and 28) which is a synergistic effect.

16. Regarding Claims 16 and 17, it would have been obvious to a person of ordinary skill in the art to have used a known lipase enzyme such as Lipopan F as it was known that it can give enhanced dough properties such as bread volume (Innova Insights, see attached).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH M.J. HANRAHAN whose telephone number is (571) 270-7060. The examiner can normally be reached on M-F from 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jennifer McNeil can be reached on 571-272-1540. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JOSEPH M.J. HANRAHAN/
Examiner, Art Unit 1794

/JENNIFER MCNEIL/
Supervisory Patent Examiner, Art Unit 1794